

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Review of Part 87 of the Commission's Rules	)	WT Docket No. 01-289
Concerning the Aviation Radio Service	)	

**REPLY COMMENTS OF GLOBALSTAR, INC.**

Globalstar, Inc. ("Globalstar"), by its attorneys and pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415 and 1.419, hereby submit its reply comments on the Second Further Notice of Proposed Rulemaking ("FNPRM") in the above-captioned proceeding.<sup>1/</sup> Globalstar supports the Commission's tentative conclusion and those commenters who assert that it would serve the public interest to amend its rules to provide for the licensing of the 1610-1626.5 MHz band (the "1.6 GHz band"), the 2000-2020 MHz band (the "2 GHz band"), and the 5000-5150 MHz band (the "5 GHz band") for Aeronautical Mobile-Satellite (Route) Service ("AMS(R)S") under the Commission's part 87 rules.

**I. INTRODUCTION AND SUMMARY**

Globalstar provides MSS voice and data services through its licensed non-geostationary satellite orbit ("NGSO") constellation. Globalstar operates earth-to-space user links in the 1610-1621.35 MHz band and earth-to-space feeder links in the 5091-5250 MHz band. As of December 2006, Globalstar served approximately 263,000 customers in more than 120 countries. Globalstar's services have proved invaluable during recent natural disasters, and have helped to demonstrate the important role MSS can play in providing reliable communications services to

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<sup>1/</sup> Second Report and Order and Second Further Notice of Proposed Rulemaking, *Review of Part 87 of the Commission's Rules Concerning the Aviation Radio Services*, 21 FCC Rcd 11582 (2006) ("FNPRM").

first-responders and other emergency response providers, particularly in instances when terrestrial and cellular telephone systems are rendered inoperable.

Globalstar is one of only two MSS providers to have been granted ancillary terrestrial component (“ATC”) authority, and currently is pursuing a developmental trial of its ATC services in partnership with public safety officials. In addition, to ensure the robustness and future of its satellite services, Globalstar is launching eight spare satellites in mid-2007, and has signed a contract with Alcatel Alenia Space for the design, manufacture and delivery of the Globalstar second-generation constellation of 48 low-earth-orbit (“LEO”) satellites. With the continued development of its ATC system and the planned launch of a second-generation constellation, which will have a lifespan through at least 2025, Globalstar is positioned to provide reliable, efficient, and effective voice and data services for the long term.

Globalstar’s diverse and growing subscriber base already includes a significant number of public safety and private aviation customers who rely on Globalstar’s products to meet their communication needs both on a day-to-day basis and during times of emergency. Expanding the bands in which AMS(R)S services may be offered to encompass Globalstar’s assigned spectrum thus would represent a logical expansion of the services Globalstar already provides and would result in the addition of a valuable new component to the Globalstar system. Globalstar thus agrees with those commenters that argue that expanding the available spectrum for AMS(R)S would serve the public interest and promote competition, and thus supports the Commission’s proposal to extend AMS(R)S licensing to the 1.6 GHz, 2 GHz, and 5 GHz MSS bands. In addition, Globalstar supports priority and preemptive access for AMS(R)S to the extent that these requirements do not conflict with or negate the long-standing coordination and interference requirements for these bands.

**11. THE COMMISSION SHOULD MODIFY PART 87 TO PERMIT AMS(R)S IN THE 1.6 GHZ, 2 GHZ, AND 5 GHZ BANDS.**

As the majority of the commenters, including Globalstar, who submitted comments in response to the 2003 Further Notice of Proposed Rulemaking (“2003 FNPRM”)<sup>2/</sup> in this proceeding agree, the Commission is correct “that it would serve the public interest to provide for the licensing of the 1.6 GHz, 2 GHz, and 5 GHz bands for AMS(R)S under part 87.”<sup>3/</sup> Nothing has occurred since the comments filed in response to the 2003 FNPRM that should alter the Commission’s tentative conclusion that it would serve the public interest to provide for AMS(R)S in these bands.

Not surprisingly, those parties filing comments in response to the Commission’s most recent notice of proposed rulemaking in the proceeding once again support the proposed amendment to Part 87.<sup>4/</sup> Indeed, as Aviation Spectrum Resources, Inc. (“ASRI”) suggests, there is an increasing need for available spectrum for AMS(R)S.<sup>5/</sup> As ASRI notes, today the “demand for aeronautical satellite service is increasing and may soon outstrip the ability of the upper L-band systems to meet this growing need.”<sup>6/</sup> In particular, ASRI adds that “[o]ver the past year,

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<sup>2/</sup> See Report and Order and Further Notice of Proposed Rulemaking, *Review of Part 87 of the Commission’s Rules Concerning the Aviation Radio Services*, 18 FCC Rcd 21432 (2003) (“2003 FNPRM”). See also Reply Comments of Globalstar L.P. filed in WT Docket 01-289 (Apr. 15, 2002); Reply Comments of Globalstar LLC filed in WT Docket 01-289 (Aug. 10, 2004).

<sup>3/</sup> FNPRM at ¶ 13.

<sup>4/</sup> See e.g. Comments of Iridium filed in WT Docket 01-289 (Mar. 6, 2007) (“Iridium Comments”); Comments of Aviation Spectrum Resources filed in WT Docket 01-289 (Mar. 6, 2007) (“ASRI Comments”).

<sup>5/</sup> ASRI Comments at 2-3.

<sup>6/</sup> *Id.* at 3

ARINC reports that its daily SATCOM traffic increased almost 50%.<sup>7/</sup> In response to this growing need and the limited spectrum available for AMS(R)S, the Commission should modify Part 87 so that additional MSS providers are able to help meet the needs of the growing aeronautical safety community.

Not only will the proposed modifications increase the spectrum available for AMS(R)S, it will ultimately “increase competition and enhance the coverage and reliability of AMS(R)S services”<sup>8/</sup> for the benefit of first responders and other satellite consumers. The current spectrum allocation provides for little or no competition for AMS(R)S offerings. Extending AMS(R)S licensing to the 1.6 GHz, 2 GHz, and 5 GHz MSS bands thus will allow multiple MSS providers with varying systems, capabilities, and technologies to offer aeronautical services, benefiting the needs of aeronautical safety. Furthermore, AMS(R)S for the 1.6 GHz, 2 GHz, and 5 GHz bands is consistent with the Commission stated policy that AMS(R)S may be provided in any frequency band allocated to MSS.”<sup>9/</sup>

**III. THE COMMISSION SHOULD ENSURE THAT ANY PRIORITY AND PREEMPTIVE ACCESS RULES ADOPTED FOR AMS(R)S IN THE 1.6 GHZ, 2 GHZ, AND 5 GHZ MSS BANDS DO NOT NEGATE THE EXISTING COORDINATION AND INTERFERENCE REQUIREMENTS.**

To be sure, AMS(R)S is an important additional service, but it should not be implemented in the 1.6 GHz, 2 GHz and 5 GHz MSS bands at the cost of the valuable MSS services already being provided. Accordingly, while Globalstar agrees with those commenters

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<sup>7/</sup> *Id.*

<sup>8/</sup> Indium Comments at 3-4.

<sup>9/</sup> FNPRM at ¶ 13.

that advocate the adoption of preemptive and priority access rules,<sup>10/</sup> it is vital that the addition of a footnote to Commission's Part 87 amendment similar to US308 for AMS(R)S in the 1.6 GHz, 2 GHz, and 5 GHz bands not override the important coordination and interference rules and standards that exist with respect to each of these bands. Indeed, as discussed below, if AMS(R)S is given priority or preemptive access without restriction, then AMS(R)S could interfere with the valuable services MSS carriers, such as Globalstar, currently provide and could lead to interference to radionavigation and radioastronomy services.

MSS providers at 1.6/2.4 GHz have been operating since inception pursuant to important coordination and interference protection requirements, and the Commission must ensure that to the extent AMS(R)S is provided in the 1.6 GHz band these requirements remain in place. Under the existing rules, Iridium and Globalstar are required to coordinate their use of the spectrum in that portion of the 1.6 GHz band that they share,<sup>11/</sup> and are subject to inter-service coordination requirements designed to protect radioastronomy and radionavigation.<sup>12/</sup> To the extent that AMS(R)S services are permitted in this spectrum, unless the existing licensed operations and coordination requirements are respected, existing services could be impaired.

Most importantly, the Commission must ensure that any priority and preemptive access rules it adopts in these bands do not affect the existing service integrity that Globalstar's

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<sup>10/</sup> See ASRI Comments at 3; Iridium Comments at 7.

<sup>11/</sup> See Report and Order, Fourth Report and Order and Further Notice of Proposed Rulemaking, *Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands; Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Service to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems*, 19 FCC Rcd 13386 ¶ 53 (2004).

<sup>12/</sup> See 47 C.F.R. §§ 25.213, 25.216.

customers — many of whom are first responders and federal and state public safety officials — require. The value of MSS in meeting the needs of the public safety community repeatedly has been demonstrated, most dramatically in the wake of the hurricanes that struck the Gulf Coast in 2005, at which time a number of customers relied exclusively on MSS for their communications needs because terrestrial and cellular systems were rendered inoperable. Any priority and preemptive access requirements that do not respect the existing coordination regime that applies in the shared portions of the MSS spectrum could threaten the availability of service during times when it is most needed. At the same time, the Commission must take care to ensure that such requirements would not enable one provider to monopolize the shared spectrum for AMS(R)S use at the expense of another — hindering that provider’s ability to meet the vital needs of its own public safety customers.<sup>13/</sup> Such an outcome would inappropriately elevate AMS(R)S services over all other public safety services for which MSS spectrum is being used, at the expense of first responders and other members of the public safety community. This clearly is not the outcome the Commission intends in this proceeding.

As is clear from the preceding discussion, the 1.6 GHz, 2.4 GHz and 5 GHz<sup>14/</sup> MSS bands are substantially different than the L-band AMS(R)S for which US footnote 308 was adopted. As discussed above, these bands already are subject to extensive coordination requirements to prevent interference among multiple providers. Thus, it is essential that any

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<sup>13/</sup> Globalstar opposes Iridium’s Comments to the extent that they support priority and preemptive access requirements in the 1.6 GHz band without any consideration of how such requirements might affect (1) Iridium’s ability to coordinate its use of those portions of the 1.6 GHz band in which Iridium and Globalstar are both licensed to operate, and (2) its own and Globalstar’s ability to meet the needs of their non-aviation public safety customers during times of emergency when they too require immediate access to an available channel.

<sup>14/</sup> The 5 GHz band is not designated in the international radio regulations as available for aeronautical MSS, but only for FSS. As far as we are aware, the FCC is the only administration considering designating the 5 GHz band for AMS(R)S.

priority and pre-emptive access scheme adopted be carrier specific and not impose any further coordination requirement among different providers. In other words, to the extent that Globalstar is providing AMS(R)S services and its channels are at capacity, Globalstar would be required to locate an available channel for the AMS(R)S call within its system, even if it means terminating another Globalstar user's connection. Indeed, the Globalstar system was designed in order to allow it to dynamically assign frequencies where they are most needed, and as a result such a requirement would be technically achievable without deviating substantially from the manner in which Globalstar already operates. In contrast, requiring Globalstar or Iridium to pass a call to one another in order to locate an available channel would be much more cumbersome and would impose additional coordination requirements on the two carriers that are wholly unnecessary and likely would take longer than simply requiring a carrier to provide for preemptive access from within its own system.

Finally, in addition to the potential harm that priority and preemptive access requirements could cause to Globalstar's public safety operations in the 1.6/2.4 GHz bands, Globalstar also notes that its feeder link operations in the 5 GHz band could be impacted by such requirements to the extent that they do not respect the existing interference standards. Specifically, these service link operations could be jeopardized if priority and preemptive access rights were implemented in a manner that ignores Globalstar's existing use and interference tolerance. For the same reasons that coordination and interference standards for the 1.6 GHz band must be respected, the interference standards in the 5 GHz band should not be negated by AMS(R)S priority and preemptive access.

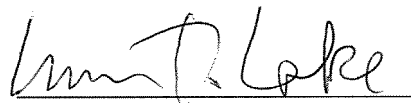
As a result, footnote 308 cannot be applied to these bands without respecting the important, long-standing coordination and interference requirements for service in this spectrum.

Going forward, it is vital for the success of AMS(R)S in these bands, and for the preservation of existing services, that the Commission ensure that any priority and preemptive access requirements it adopts do not harm the current array of MSS services.

#### **IV. CONCLUSION**

For the foregoing reasons, Globalstar supports the Commission's proposal to provide for the licensing of the 1.6 GHz, 2 GHz, and 5 GHz bands for AMS(R)S under part 87 of its rules. However, to the extent the Commission chooses to adopt priority and preemptive access requirements in these bands, it must do so with the explicit understanding that they do not override the long-standing coordination, sharing, and interference standards that govern existing service providers in this spectrum. As discussed above, the imposition of additional or inconsistent priority or preemptive access requirements is unnecessary and would impose an unjustifiable hardship on existing providers operating in this spectrum.

Respectfully Submitted,



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